

of the administration of benzine in the epidemic just mentioned will soon be published. Professor Mosler afterwards experimented on four pigs, which were fed with trichinous rabbit's flesh. Pig number 1 was then left without any medicine, number 2 took sulphite of soda, 3 and 4 took benzine. In number 1 severe morbid symptoms set in about a fortnight after infection. The animal became much emaciated and weak on its legs, the eyes were dim, the voice exceedingly hoarse, and it often screamed with pain. The pulse was fast, the skin very hot, the thirst considerable. All these symptoms were entirely wanting in Nos. 3 and 4, which had eaten the same quantity of trichinous meat, but had been treated with benzine a week after infection. From this it was justly concluded that a much larger number of trichinæ had immigrated into the muscles of number 1 than in those of Nos. 3 and 4. In order to be quite certain about this point, twenty days after infection a small piece of the pectoralis-major muscle was excised from the three pigs, and a quantity weighing one-twentieth of a gramme (less than a grain) was found to contain in number 1 about 257 trichinæ, while in number 3 there were 95, and in number 4 the same number. The worms were counted over several times in order to avoid mistakes, which proved very trifling. The morbid symptoms went on increasing in number 1 until three weeks after infection, when Professor Mosler thought of trying whether, by the administration of benzine in that advanced stage of the disorder, benefit might still be obtained. After the first dose had been given the severity of the disorder did no longer increase, and after a few others there was more appetite and less heaviness. The animal took altogether four ounces of benzine within twenty days without any bad results. After that time most of the morbid symptoms had disappeared. A piece of flesh was now excised for ascertaining whether there had been any effect on the trichinæ in the muscles, but they were found to be still living, and even larger doses of benzine, which were subsequently given, killed only a few of them.

Pig number 2 was fed with the same quantity of trichinous rabbit flesh as number 1, but from the seventh day it took daily half an ounce of sulphite of soda with the food for some time. Copious diarrhœa ensued, but no intestinal trichinæ could be found in the feces, so that it would appear that ordinary purgatives have no action on intestinal trichinæ. The symptoms of trichinosis were well-marked in this animal.

Pig number 3 was fed with trichinous meat as before, and had no medicine for eight days, in order that the use of benzine might only be commenced at a time when it is possible, in certain cases, to diagnose trichinosis in man. After the first dose of benzine the animal passed sixteen ascarides, a fresh proof for the anthelmintic properties of the drug. No morbid symptoms appeared, from which it was concluded that benzine had killed, if not all, at least a large number of intestinal trichinæ. This supposition was confirmed by the examination of a piece of flesh excised from the pectoral muscle, and in which the number of trichinæ found was, as has been stated, considerably less than in pigs numbers 1 and 2. The animal continued to take two drachms of benzine per diem for some time, and did exceedingly well.

Pig number 4 was treated much in the same manner, and never fell ill at all. Benzine agreed so well with it that it grew very much, taking at one time two ounces of that drug per diem for five days consecutively. It would therefore appear that a cautious administration of benzine in man cannot be hurtful. Professor Mosler is at present experimenting upon the action of benzine on tapeworm, and it would certainly be a boon if he were to give us a certain remedy for this troublesome parasite which so frequently baffles all our well-meant and energetic therapeutical efforts.—*Med. Times and Gaz.*, Oct. 22, 1864.

8. *Bromide of Potassium as a Sedative.*—Dr. A. GUBLER, physician to the Beaujon Hospital, has been investigating, by experiment and clinical observation, the action of bromide of potassium. He has given it in laryngeal and bronchial affections, in œsophageal spasm, in hysteric and spasmodic cough, in chorea and other nervous disorders, and in heart disease; and sums up his memoir with the following conclusions.

Bromine, in combination as a salt, is not only an anaphrodisiac, or an anæsthetic to the throat; it is a powerful general sedative. Bromide of potassium has generally been preferred; but the preference should probably be given to bromide of sodium, on account of the greater tolerance, on the part of the animal system, of soda-salts, which enter in large proportion into the composition of the tissues of the body. Bromide of potassium, in average daily quantities of about thirty-five grains, in two or three doses, in some mucilage or sugared water, produces a marked sedative effect on the sensory and motor nervous system and on the circulation. As an anæsthetic, it acts more on the internal than on the external integuments, and especially on the isthmus of the fauces, the pharynx, and the genito-urinary passages. The action, however, is not confined to these parts, but extends into the neighbouring regions; especially the œsophagus, larynx, and air-tubes. By this action, painful dysphagia, œsophageal contractions, and spasmodic cough, are calmed. Bromide of potassium acts equally on the nervous centres, as a contrastimulant. It relieves congestive headache, prevents or moderates convulsions, diminishes the excito-motor action of the cord, and relaxes tetanic contractions, while at the same time it restrains reflex action. Under the influence of the alkaline bromide, the action of the heart is moderated and rendered slow, turgescence of the capillaries is diminished, and fever is abated. Diuresis, if it have not already existed, appears on the cessation of febrile excitement. Perspiration, on the other hand, is arrested; and the formation of pus and mucus is diminished. The symptoms of *bromism* are almost exactly the opposite of those of *iodism*; hence bromine may be regarded and used as an antidote to iodine.—*British Medical Journ.*, Sept. 17, from *Bull. Gén. de Thérap.*, July 15 and 30, 1864.

9. *Alkaloids of Peruvian Bark*.—Mr. J. E. HOWARD invites increased attention (*Medical Mirror*, Sept. 1864) to the specific therapeutic effects of the several alkaloids contained in the Cinchonæ. He has been occupied for more than thirty years in the extraction of quinia and other products of these barks, and has largely exhibited the cheaper products with satisfactory results. It is a great desideratum to obtain a cheaper remedy than quinia, and one which shall at the same time be sufficiently powerful to be relied on. Mr. H. is now with this view employing the commercial *muriate of cinchonine*, and has no reason to doubt its efficacy, and though required in larger doses than the sulphate of quinia, it is still cheaper.

"*Cinchonidine* (which must not be confounded with cinchonine) is," says Mr. H., "an alkaloid which experience has led me to value highly. I have treated successfully with this alone the most fatal forms of intermittent fever occurring in this country, called in some districts 'the dead ague,' in which the external exacerbations of fever subside, but the spleen enlarges, and dropsy and death supervene. I may also mention that this must have been the alkaloid which cured the Countess of Cinchon, since the *Cinchona chahuarguera*, to which (by tradition) her cure is ascribed, is specially rich in this product. Moreover, the cases of intermittent fever reported in the *American Journal of the Medical Sciences*, as successfully treated by *quinidine*, were really treated by *cinchonidine*, as I have elsewhere shown." The real relationship of *cinchonidine* is to *quinine*, and not to *cinchonine*, as its name unfortunately implies. I am much inclined to believe that cinchonidine produces less cerebral disturbance than quinine, and the late Dr. Royle (of East Indian celebrity), who, at my request, tried several experiments with it, concurred with me in this opinion. If this should prove to be the fact, it would surely be a very important one for the interests of humanity.

"*Quinidine* has, probably, some peculiarity in its action on the system; but this has to be ascertained. It is important that it should be understood that the (so-called) quinidine of commerce is more often wholly or in part cinchonidine.

"*Aricine* has given such discouraging results in my hands, that I have not ventured to employ it. I have been led to suspect emetic qualities in the

¹ See my "Quinologia" under the head of *Cinchona Chahuarguera*.